## IN THE ABSTRACT:

Please insert the following Abstract:

-- A sighting device is provided for an examination of the eye, including at least one moving target with a programmable form and trajectory, the target being displayed on a visualisation unit, such as an appropriate screen and visible from both eyes during the examination. An in-vivo tomographical eye examination system is also provided, including: a Michelson interferometer, generating a full-field OCT image, adaptable optical apparatus, arranged between the interferometer and an eye for examination, achieving the correction of the wavefronts coming from the eye and also the wavefronts going to the eye, detection apparatus, arranged after the interferometer, permitting the interferometric measurement by the OCT principle without modulation nor synchronised detection and a sighting device, with at least one mobile target with a programmable form and trajectory, the target being displayed on an appropriate screen and visible from at least one of the eyes during the examination. --